

Northeast Wyoming Regional Airport Gillette, Wyoming AIP 054 – 2023 WYDOT AGC014 Rehabilitate GA Apron

Scope of Work

General

The general scope of work is to provide the Northeast Wyoming Regional Airport the Assistance with the Preliminary and Final Design Engineering for the Airport Improvements for the Rehabilitate GA Apron project. The scope shall include a brief study of the project layout, preparation of preliminary cost estimate, meetings with the OWNER, WYDOT, and FAA to discuss the project, preparing and submitting the application for Federal and State assistance, obtaining survey data, studying alternative construction phasing to minimize impacts to airport users, pavement design, preparation of opinions of total project costs, and preparation of preliminary and final plans and specifications.

AIP 054 deliverables will consist of providing Northeast Wyoming Regional Airport, FAA, and WYDOT Aeronautics a complete set of construction plans and project specifications for project bidding.

The Bidding Process, Construction Observation, and Construction Grant Management will be provided in the AIP 054-2023 Airport Improvement project.

The proposed work will consist of:

Schedule 1 – GA Apron Concrete Panel Replacement

Schedule 2 - Upgrade Apron Lighting

A further breakdown of specific project details is as follows:

Schedule 1 – GA Apron Concrete Panel Replacement

- Removal of select damaged concrete panels on the existing GA Apron.
- Rehabilitate any inlets in the paving portion.
- Pave back removed panels in a similar design section as the surrounding panels.

Schedule 2 – Upgrade Apron Lighting

 Installation of new apron lighting fixtures to match new lighting on the north side of the apron. New fixtures would be either attached to buildings or high mast fixtures.

Construction will consist of 100 calendar days and engineer's construction estimate is approximately \$750,000.

Phases II & III will follow the guidelines laid out in the Master Agreement for Professional Engineering Services dated May 15, 2019.



A. Specific Project Data

- 1. Provide Environmental CATEX.
- Provide Draft Construction Safety and Phasing Plan to airport, FAA, WYDOT, and tenants for review and comments, show phasing, haul routes, staging and stockpile areas,
- 3. Provide Design survey, ground topo, existing pavement ties, utilities locates,
- 4. Programming/Schematic (10%) meeting with Owner and Engineer.
- 5. Design Development (35%) meeting with Owner, Engineer, and Architect. Final layout will be selected, and proration calculations applied.
- 6. Prepare Final Construction Safety and Phasing Plan and submit to FAA and WYDOT. Final CSPP will be submitted through OE/AAA for airspace review. Submittals will include temporary equipment, cranes, stockpiles, and permanent building structures,
- 7. Prepare construction estimate,
- 8. Submit Final Design Report to Owner, FAA, and WYDOT,
- 9. Provide 60% and 95% plans and specifications for the construction to FAA, WYDOT, and Sponsor for review and comments,
- 10. Prepare Final plans and specifications,
- 11. Provide assistance in the project bidding process,
- 12. Provide prebid conference,
- 13. Prepare bid tabulations,
- 14. Prepare bid recommendation,
- 15. Prepare bid award to successful bidder,
- 16. Prepare Construction Management Plan (if required),
- 17. Provide construction observation,
- 18. Provide contract grant management,
- 19. Provide construction layout survey,
- 20. Provide final project closeout documents to the Owner, FAA, and WYDOT including closeout contract documents with the Contractor, final project report, record drawings, and the ALP drawings update.

B. <u>Design and Construction Administration of Airport Improvement Projects:</u>

<u>Phase I</u> – Programming and Pre-Design Activities for the Project:

- 1. Develop Project Scope and prepare a Task Order for the professional services, including the development of:
 - Phase II Preliminary Design Engineering for the Project
 - Phase III Final Design Engineering for the Project
 - Phase IV Assistance in the Bidding Process
 - Phase V Construction Phase Services
 - Phase VI Project Closeout
- 2. Attend predesign conference with Airport, WYDOT, and FAA officials to discuss scheduling and scope of the project. Issues to be discussed include design schedule, construction project scope, projected bid opening dates, and construction period.
- 3. Prepare Fiscal Year DBE goals and report on previous Fiscal Year DBE goal achievements. This includes revising, development, and approval of DBE goals in the event that anticipated amount of federal funds is in excess of \$250,000 per year and in accordance with



FAA Civil Rights criteria in effect at the time of the Task Order, as well as reporting DBE Achievements via the FAA Civil Rights DOORS on-line reporting system.

Phase II - Preliminary Design:

- 1. Perform investigative services and identify and evaluate the alternate solutions available to the OWNER as listed in the Task Order.
- 2. Prepare schematic development plans for the project, update **Engineer's** opinion of total project costs for alternative layouts or procurement of equipment. Evaluate alternatives for phasing of construction to minimize impacts to airport users and enhance airport safety and operations. Prepare schematic phasing plans and meet with the **Owner** and Airport Users (Stakeholders) to discuss alternate layouts and phasing alternatives.
- 3. Develop Project construction plans and specifications to approximately 60% completion and update the **Engineer's** opinion of total project costs.

Phase III - Final Design and 100% Design Review for the Project:

- 1. Following the 60% review of the Phase II Preliminary Design by the **Owner**, DEQ, and County based on their acceptance, modification and direction, prepare final plans and specifications indicating the scope, extent and character of the Work to be performed and furnished by the Contractor(s) or Equipment Suppliers.
- 2. Develop the Project construction plans and specifications to approximately 100% completion and update the **Engineer's** opinion of total project costs. Intermediate submission of plans and specifications may be required depending on the project.
- 3. Update the **Engineer's** opinion of total project costs. Identify items of work which will be bid as alternative bid items.
- 4. Print and also provide an electronic copy (PDF) for 100% review plans and specifications (Project Manual), Final Design Report to **Owner** for a 100% review.
 - 5. Participate in final review meeting
- 6. Following review of the 100% submittal by the **Owner** based on their acceptance, modification and direction prepare final plans and specifications and update the **Engineer's** opinion of total project costs based on the final plans and specifications.
 - 7. Provide final copies of plans and Specifications and bid package to **Owner** for their files.
- 8. Attend Airport Board meetings as required, to update Project progress. The maximum of meetings with the Airport Board shall be as specified in the Task Order.

Phase IV - Provide Assistance in the Bidding Process:

Once the Project is authorized by the State and the **Owner** to be advertised for construction, Phase IV of this Agreement shall commence and the **Engineer** shall:



- 1. Prepare and distribute a notice to bidders or a copy of the Invitation to Bid for the upcoming project.
- 2. Provide plans and specifications for the construction of the improvements set forth in the Task Order. For bidding, provide the **Owner** with copies and the County one copy of the plans and specifications. Plans and specifications will be offered to bidding Contractors in printed or electronic format for a non-refundable fee to cover reproduction and postage costs. Plans and specifications for Plan Exchanges will be provided in electronic (PDF) format.
- 3. Distribute plans and specifications via on-line bidding or paper distribution to contractors, subcontractors, suppliers, and manufacturers for the purpose of bidding.
- 4. Conduct a Pre-bid Conference to discuss airport operational safety during construction, airport security requirements, project construction schedule, and construction specifications with prospective contractors. This will include providing a meeting attendance list, meeting agenda and meeting minutes.
- 5. Research and provide answers to Bidders during the advertisement period. Provide and distribute addendums if required.
- 6. Prepare a final Engineer's opinion of probable cost based on the final plans and specifications for use as a guide in considering bids at the bid opening.
- 7. Attend the project Bid Opening. Review each bidder's bid submission for completeness and errors, including a review the Bidder's qualifications documentation submitted in accordance with the general provisions of the project specifications. Review the low bidder's packet for compliance and completeness.
 - 8. Prepare Bid Tabulations and provide a letter of recommendation of award to the **Owner**.

Phase V - Construction Phase Services:

Following the Award of Construction Contract(s) by the **Owner**, Construction Phase Services shall commence and the **Engineer** shall:

- 1. Prepare a notice of award and assist the **Owner** in preparation of the Construction Contract Documents.
- 2. Executed contract documents will be gathered, bound into a project specification book, and distributed to the **Owner**, FAA, and the Contractor.
- 3. Schedule and conduct a Pre-construction Meeting with the selected construction contractors and subcontractors and Airport Stakeholders. This will include providing a meeting attendance list, meeting agenda and meeting minutes.
- 4. Stake the project for construction in accordance with the Project Specifications and as defined in the Task Order for the project.
- 5. The **Engineer** shall provide construction administration and observation services as required for substantial compliance with the Contract Documents. The **Engineer** will keep the **Owner** informed of the progress of the work, endeavor to guard the **Owner** against defects and



deficiencies in the work of the Contractor, and shall <u>reject or stop work</u>, as appropriate, failing to conform to the Contract Documents. The **Engineer** or its authorized representative shall keep adequate Project records and field reports of work during construction.

- 6. Provide the services of a Resident Project Representative (RPR) at the site to assist the **Engineer** and to provide observation of Contractor's work. Duties, responsibilities, and authority of the RPR are as set forth in Exhibit B. The furnishing of such RPR's services will not extend **Engineer's** responsibilities or authority beyond the specified limits set forth elsewhere in this Agreement.
- 7. Visits to site and construction observation. In connection with observations of Contractor's work while it is in progress:
- a. Make visits to the site at intervals appropriate to the various stages of construction, as **Engineer** deems necessary, in order to observe the progress and quality of the Work. Such visits and observations by **Engineer** and **Engineer's** RPR are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress or to involve detailed inspection of Contractor's work in progress, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work. Based on information obtained during such visits and such observations, **Engineer** will determine in general if Contractor's work is proceeding in accordance with the construction Contract documents, and **Engineer** shall keep **Owner** informed of the progress of the work.
- b. The purpose of **Engineer's** visits to, and observation by the **Engineer's** Resident Project Representative will be to enable **Engineer** to better carry out the duties and responsibilities assigned to and undertaken by **Engineer** during the construction phase, and, in addition, to provide for **Owner** a greater degree of confidence that the completed Work will conform in general to the Contract Documents. **Engineer** shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's work, nor shall **Engineer** have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by Contractor, for safety precautions and programs incident to Contractor's work, or for any failure by Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work. Accordingly, **Engineer** neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the construction Contract documents.
- 8. Require such special inspections or tests of Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspection, tests, and approvals. **Engineer's** review of such certificates will be for the purpose of determining that the results certified indicate compliance with the construction Contract documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the construction Contract documents. **Engineer** shall be entitled to rely on the results of such tests.
 - 9. Prepare weekly construction observation reports for review by the **Owner** and the State.
- 10. Based on the on-site observations of the **Engineer's** RPR and review of Contractor(s)' applications for payment and the supplemental data and schedules, the **Engineer** shall approve, in writing, the amounts owed to the Contractor(s), and in accordance with the



provisions of the General Conditions of the construction Contract documents shall approve payments to the Contractor(s) in such amounts.

Approvals of payment shall constitute a representation to the **Owner**, based on such observations and review, that the work has progressed to the point indicated and that, to the best of **Engineer's** knowledge, information and belief, the quality of the work is in accordance with the construction Contract documents subject to an evaluation of the work upon substantial completion and subject to the results of subsequent tests, and to any other qualifications stated in the **Engineer's** approval.

By approving applications for payment, the **Engineer** shall not be deemed to have represented that it has made any examination to determine how or for what purpose any Contractor has used the money paid on account of the contract price, or that title to any of the Contractor(s)' work, materials or equipment has passed to the **Owner** free and clear of any lien, claims, security interests, or encumbrances.

- 11. Make recommendations to the **Owner** on all claims relating to the execution and progress of the construction work.
- 12. Notify the **Owner** of permanent work that does not conform to the result required in the construction Contract documents, prepare a written report describing any apparent non-conforming permanent work, make recommendations to the **Owner** for its correction, and, at the request of the **Owner**, have these recommendations implemented by the Contractor.
- 13. Review shop drawings, samples, certifications and other submittals of the Contractor only for general conformance to the design concept of the Project and for general compliance with the construction Contract documents. Such reviews and approvals will not extend to the means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto.
- 15. Prepare incidental Change Orders for the **Owner's** approval. Incidental in this reference would require no additional design or construction management. (Change Orders involving additional design and construction management services shall be considered Additional Services and subject to Section 2.02 of this Agreement).
- 16. Promptly, after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with **Owner** and Contractor, conduct an inspection to determine if the Work is substantially complete. If, after considering any objections of **Owner**, the **Engineer** considers the Work substantially complete; **Engineer** shall then deliver a certificate of substantial completion to **Owner** and Contractor.
- 17. Final Notice of Acceptability of the Work. Conduct a final inspection to determine if the completed Work of Contractor is acceptable so that **Engineer** may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, **Engineer** shall also provide a notice in the form attached hereto as Exhibit C (the "Notice of Acceptability of Work") that the Work is acceptable to the best of the **Engineer's** knowledge, information, and belief and based on the extent of the services provided by **Engineer** under this Agreement.



Phase VI - Project Closeout Phase Services:

- 1. Contractor's Completion Documents.
- a. Receive and review maintenance and operating instructions, schedules, and guarantees.
- b. Receive bonds product, certificates, certificates of inspection, tests, and approvals, shop drawings, samples, and other data required by the construction Contract documents and the annotated record documents which are to be assembled by Contractor in accordance with the construction Contract documents to obtain final payment.
- c. The **Engineer** in the construction Contract documents shall require the Contractor to prepare as constructed record documents in accordance with requirements which shall show any changes that were made in the plans and specifications during construction. A copy of the as-constructed plans shall be furnished to the **Engineer**. Final payment to Contractor will be made contingent on receipt of the as-constructed plans.
 - d. Engineer shall transmit all of the Contractor's completion documents to Owner.
- 2. Upon completion of construction, the **Engineer** shall prepare a "Final Project Report" in accordance with appropriate ADO Notices in effect at the time of the project. The **Engineer** shall furnish the **Owner** with two (2) hard copy sets of record drawings, specifications, shop drawings, submittals and Operation and Maintenance Manuals based on information furnished to the **Engineer** by the Contractor. The **Engineer** shall furnish one (1) copy of the Final Project Report to the Owner in printed and PDF format.

The construction specifications shall require the Contractor to perform all tests of materials and construction layout surveys and to submit a set of marked up as-constructed plans. The Contractor will be responsible for retaining the services of a certified materials testing firm to perform quality control and acceptance testing in accordance with requirements. The **Engineer** will utilize the above Contractor-furnished layout and testing data to prepare the Final Project Report.

Copies of documents that may be relied upon by **Owner** are limited to the printed copies (also known as hard copies) that are signed or sealed by **Engineer**. Files in electronic media format of text, data, graphics, or of other types that are furnished by **Engineer** to **Owner** are only for convenience of **Owner**. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. **Engineer** shall not be responsible to maintain documents stored in electronic media format after acceptance by **Owner**.

When transferring documents in electronic media format, **Engineer** makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by **Engineer** at the beginning of this Project.



3. Limitation of Responsibilities. **Engineer** shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing any of the Work. **Engineer** shall not be responsible for the failure of any Contractor to perform or furnish the Work in accordance with the construction Contract documents.